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09/912,227	07/24/2001	Seppo Hamalainen	944-003.079	4331

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WARE FRESSOLA VAN DER SLUYS &
ADOLPHSON, LLP
BRADFORD GREEN BUILDING 5
755 MAIN STREET, P O BOX 224
MONROE, CT 06468

EXAMINER

NGUYEN, BRIAN D

ART UNIT

2661

PAPER NUMBER

DATE MAILED: 12/24/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,227

Applicant(s)

HAMALAINEN, SEPPO

Examiner

Brian D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the application filed 7/24/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-14 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. Abstract, lines 14-16, "Often, the second indication of the quality of the signal is either a changed SIR target value" is an incomplete sentence.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

2. Claims 7, 9, 17, and 19 are objected to because of the following informalities:

Claims 9 and 19, it is suggested to change "RNC" to ---radio network controller (RNC)---

Claims 7 and 17, "a mobile station" and "a base station" in line 2 seem to refer back to "a mobile station" and "a base station" in line 2. If this is true, it is suggested to change "a mobile station" and "a base station" to ---the mobile station--- and ---the base station---.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 7-8, 10-13, 17-18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Miya (6,163,705).

Regarding claims 1, 7-8, and 10, Miya discloses a method of deciding whether to perform link adaptation for communication from a first communication device to a second communication device, the second communication device examining a signal received from the first communication device (mobile, base) and providing a first indication (1105 of figure 11; col. 10, lines 2-50) of the quality of the signal as received by the second communication device, the method comprising the steps of: a) recording at least one first indication (1105) of the quality of the signal as received by the second communication device; b) providing a second indication (1107) of the quality of the signal based on the at least one first indication of the quality of the signal; and c) deciding to perform link adaptation based on the second indication of the quality of the signal (see col. 7, lines 41-48 where the speed is variable).

Regarding claim 2, Miya discloses the first indication is an SIR estimate (see 1105 of figure 11).

Regarding claim 3, Miya discloses the second indication is an SIR target value (see 1107).

Regarding claims 11-13, 17-18, and 20, claims 11-13, 17-18, and 20 are apparatus claims that have substantially all the limitations of the respective method claims 1-3 and 8. Therefore, they are subject to the same rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 7-8, 10-14, 17-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom et al (6,639,934) in view of Sebastian (2003/0003920).

Regarding claims 1-3, 7-8, and 10, Engstrom discloses a method for a communication between a mobile and a base station comprising storing an SIR estimate, providing an SIR target value (see figure 5a; col. 4, line 59-col. 5, line 8). Engstrom does not specifically disclose performing link adaptation based on the second indication (SIR target value). However, Sebastian discloses that SIR can be used for link adaptation (see 0064). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the SIR target for link adaptation as taught by Sebastian in the system of Engstrom so that the transmission rate can be changed based on the quality of signal to guarantee quality of service and improve system efficiency.

Regarding claim 4, Engstrom further discloses change the SIR target value and a predetermined maximum and minimum (thresholds) SIR target (see SIR target adjustment in figure 5a; col. 8, lines 1-12). Engstrom does not disclose some predetermined margin. However, to set a margin for the max and min targets is a matter of choice. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to set a margin

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for max and min target values in order to guarantee the changing of target value will never exceed the target range.

Regarding claims 11-14, 17-18, and 20, claims 11-13, 17-18, and 20 are apparatus claims that have substantially all the limitations of the respective method claims 1-3 and 7-8. Therefore, they are subject to the same rejection.

Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom et al (6,639,934) in view of Sebastian (2003/0003920) as applied to claims 1 and 11 above, and further in view of Knutsson et al (6,085,108).

Regarding claims 9 and 19, Engstrom in view of Sebastian do not specifically disclose an RNC performs on of more of the steps. However, to perform one or more of the steps in the mobile, base, or RNC is a matter of design choice. Knutsson discloses a RNC perform one or more of the steps (see col. 3, lines 4-21). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the RNC performs one or more of the steps as taught by Knutsson in the system of Engstrom in view of Sebastian in order to meet specific needs such as to minimize the size of a mobile unit..

Allowable Subject Matter

7. Claims 5-6 and 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133.

The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Brian Nguyen
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12/18/03